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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,803	08/03/2001	Hugh James O'donnell	OT-4812	8340

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EXAMINER	
KRUER, STEFAN	
ART UNIT	PAPER NUMBER
3654	

MAIL DATE	DELIVERY MODE
10/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/921,803	O'DONNELL ET AL.	
	Examiner	Art Unit	
	Stefan Kruer	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 September 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6 - 8, 16 - 26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6 - 8, 16 - 26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6 – 8, 17, 21 and 23 - 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcox (4624,097) in view of Harper (3,848,037).

Wilcox discloses a method comprising:

- Arranging a plurality of elongate load carrying members (24) in a selected arrangement,
- Coating the load carrying members with a single urethane coating (Col. 2, Line 43),
- Using a thermal polyurethane coating (32, Col. 3, Line 59),
- Coating the entire plurality of load carrying members with a single urethane coating (32),
- Coating an entire plurality of load carrying members with a single urethane coating (32),
- Wherein said plurality of elongate load carrying members are metallic (Col. 1, Lines 15 – 25).

however, though Wilcox is silent regarding his urethane coating containing a wax, Wilcox discloses the application of a fatty acid amide as a lubricant wherein the "... lubricant is present in the finished rope" (Col. 3, line 1). Wilcox offers the viability of other lubricants (Col. 3, line 60 – Col. 4, Line 4) generically known as waxes (Exhibit A).

Attention is directed to Harper who teaches a "silicone release agent" as prior art (Col. 1, line 46) whereby his inventive feature are "... surfaces free of ... mold release agent, and having smooth ... wax-free... surfaces... which may be easily released from

the mold" (Col. 2, Lines 13) by means of his inventive method to "... produce polyurethane moldings having surfaces that are totally ... wax-free" (Col. 3, Line 21).

Harper includes the use of silicone material as a treating (hydrophobic) material of a conventional mold that, while enabling "... easy removal of the molded article from the mold, (sic) the release agent advantageously adheres strongly to the mold but not to the molded article" (Col. 3, Line 1) due to an intermediary hydrophilic barrier layer (Col, 2, Line 58). The latter is subsequently removed by inexpensive, non-toxic and readily available aqueous solutions (Col. 4, Line 75).

It would have been obvious to one of ordinary skill in the art to modify the reference of Wilcox with the teaching of Harper to utilize a conventional mold release agent and mold in combination with the inventive barrier layer to promote the use of conventional technologies and materials while obtaining a wax-free surface by means of an intermediary, water soluble barrier layer for savings in costs, ease of sourcing and performance.

Claims 16, 18 – 19, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcox in view of Harper, as applied to Claim 6, and in further view of Aulanko et al (WO 98/29326).

Re: Claims 16, 18 and 22, Wilcox discloses his coating of his load carrying members as having a circular cross-section.

Harper teaches producing polyurethane moldings having wax-free surfaces.

Attention is directed to Aulanko et al who teach their polyurethane-based coating of their load carrying members having a rectangular cross-section (Figures 2 – 7, Page 4, Lines 10 – 30), for the features of smaller sheave diameters, uniform application of pressure on the sheaves as well as minimizing the sliding of the load carrying members.

It would have been obvious to one of ordinary skill in the art to modify the reference of Wilcox and Harper with the teachings of Aulanko et al for the benefits of reduced drive capacity and weight as well as prolonging the service life of the rope.

Re: Claim 19, Wilcox discloses a thermal polyurethane coating.

Re: Claim 20, Wilcox discloses a coating a plurality of load carrying members with a single urethane coating.

Response to Arguments

Applicant's arguments filed 27 September 2007 have been fully considered but they are not persuasive.

The reference of Wilcox discloses the structure of the claim language with exception to a wax-free coating as addressed above. The coating of Wilcox, as reviewed, contains a wax for the feature of releasibility from molds as known in the art and reviewed in the specification of the instant invention.

Harper teaches the application of coatings wherein the resultant embodiment is free of wax for the benefit of subsequent application of coating (painting) without compromising its releasability from molds. The reference of Wilcox is primarily directed to the use of (then) "... conventional rope making techniques and equipment..." in his inventive manufacture of synthetic rope having characteristics of "... good flexibility, high-strength to weight and resistance to deterioration..." Consequently, Wilcox simply acknowledges the presence of a wax for the beneficial purpose of a release agent, as known to one having ordinary skill in the art at the time of his invention. Wilcox is not concerned with the subsequent treatment of his coated embodiment.

Harper, however, teaches the advantage of having a wax-free, coated surface for purpose of subsequent treatment (painting), wherein the feature of releasibility is not compromised. Therefore, Harper teaches the ability of manufacturing an element of polyurethane structure or surface that is free of wax for the feature of subsequent treatment, such as painting (wherein adhesion is of concern), without detrimentally impacting the ability to release the element from its mold.

That the intent of the instant invention is to have a wax-free surface to minimize/eliminate a build-up on pulley surfaces is inherent to the teachings of Harper.

Neither the original claim language nor the newly submitted claim language overcame the rejections based on the prior art of record of the previous office action.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kuo et al (4,585,829) and Olesen et al (4,956,039) are again cited for reference of externally and internally applied mold release agents for the manufacture of polyurethane-based components, comprising either organic compounds or waxes, and coating a plurality of elongate load carrying members using a thermal polyurethane and review of release properties, respectively, whereas O'Donnell et al (5,881,843) is cited again for reference of a coated elevator rope assembly having in the alternative a plurality of metallic load carrying members that are inherently fire resistant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571.272.6856. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

SHK
27 September 2007

Peter M. Cuomo
Supervisory Patent Examiner
Technology Center 3600